

Die C. Arnoldt
2A

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)
Briggs and Tatum) Examiner:
Serial No.) Group Art Unit:
Filed: December 15, 1998) Atty. Dkt. No. 00295.77957

For: CONSTRUCTION OF PASTEURELLA HAEMOLYTICA VACCINES

PRELIMINARY AMENDMENT

The Honorable Assistant
Commissioner for Patents
Washington, D.C. 20231

Sir:

If any fees are needed to enter this amendment, please charge our Deposit Account No. 19-0733.

IN THE SPECIFICATION

Page 1, between lines 1 and 2, insert the following:

--RELATED APPLICATION

This application is a continuation of U.S. Serial No. 08/643,299, filed May 8, 1996, which is a divisional application of U.S. Serial No. 08/162,392, filed December 6, 1993. *now US Pat. 5,849,305* *BP 2A9* *5,582,305*

IN THE CLAIMS

Please cancel claims 1-33.

Please add the following new claims:

--34. A vaccine for *P. haemolytica* which comprises an *aroA* mutation introduced into *P. haemolytica* using methylated DNA, which is administered by intranasal, intratracheal, intramuscular, subcutaneous, intravenous, or oral routes.

35. The vaccine of claim 34 containing an adjuvant.